

Application Serial No. 10/674,162
Reply to Office Action of July 19, 2006

PATENT
Docket: CU-3338

Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Currently Amended) An upright ~~type~~ vacuum cleaner comprising:

a main body including a dust collecting chamber having a dust filter, said dust filter having an air inlet and an air outlet, and a motor driving chamber in fluid communication with the air outlet of said dust filter to draw air through said dust filter from said dust filter air inlet;

a suction brush mounted on the main body of the vacuum cleaner to draw in air with entrained contaminants found on a surface to be cleaned, the suction brush being configured to contact the surface to be cleaned;

a cyclone dust collecting apparatus detachably mounted in a path between the suction brush and the air inlet of the dust filter, said cyclone dust collecting apparatus ~~collecting chamber for~~ separating and collecting the dust and filth from the air drawn in through the suction brush; and

~~a path forming member~~ a removable air suction pipe, connecting the cyclone dust collecting apparatus and the suction brush, for said removable air suction pipe guiding the air drawn in through the suction brush to the cyclone dust collecting apparatus, when said cyclone dust collecting apparatus is attached to the main body, said removable air suction pipe guiding air drawn into the suction brush into the dust filter when the cyclone dust collecting apparatus is detached from the main

Application Serial No. 10/674,162
Reply to Office Action of July 19, 2006

PATENT
Docket: CU-3338

body and said removable air suction pipe is attached to the main body.

2. (Currently Amended) The vacuum cleaner of claim 1, wherein the cyclone dust collecting apparatus comprises:

a cyclone body having a cyclone air inlet connected to the ~~path-forming member~~ air suction pipe and a cyclone air outlet connected to the air inlet of the dust ~~filter collecting chamber~~, to guide the air drawn in through the cyclone air inlet so as to form a vortex current; and

a dust receptacle, removably coupled to the cyclone body for collecting dust and filth separated by the centrifugal force of the a vortex current of the drawn air.

3. (Original) The vacuum cleaner of claim 2, wherein the cyclone dust collecting apparatus further comprises a grill disposed in the dust receptacle in fluid communication with the cyclone air outlet, the grill having a plurality of through holes to prevent contaminants entrained in the air from flowing into the cyclone air outlet.

4. (Original) The vacuum cleaner of claim 2, wherein a first receiving depression is formed at a rear side of the main body of the vacuum on which the cyclone body is mounted, and a second receiving depression is formed at the rear side on which the dust receptacle is mounted.

5. (Currently Amended) The vacuum cleaner of claim 2, wherein the cyclone body further comprises:

Application Serial No. 10/674,162
Reply to Office Action of July 19, 2006

PATENT
Docket: CU-3338

a duct connected at one end to the air inlet of the dust filter ~~collecting chamber~~ and connected at another end to the cyclone air outlet; and
a fixing unit detachably coupling the cyclone dust collecting apparatus to the main body of the vacuum cleaner.

6. (Currently Amended) The vacuum cleaner of claim 5, wherein the duct has a bent portion between a first coupling portion connected to the cyclone air outlet and a second coupling portion connected to the air inlet of the dust filter.

7. (Currently Amended) The vacuum cleaner of claim 5, wherein the fixing unit further comprises:

a coupling projection formed at a ~~[[the]]~~ first receiving depression; and
a coupling recess formed in the duct at a position corresponding to the coupling projection.

8. (Currently Amended) The vacuum cleaner of claim 1, wherein the ~~path-forming member~~ air suction pipe is a flexible hose.

9. (Currently Amended) An upright ~~type~~ vacuum cleaner comprising:

a main body including a dust collecting chamber having a dust filter having an air inlet and an air outlet, and a motor driving chamber in fluid communication with the air outlet of the dust filter;

a suction brush mounted adjacent the main body of the vacuum cleaner to

Application Serial No. 10/674,162
Reply to Office Action of July 19, 2006

PATENT
Docket: CU-3338

draw in contaminant -laden air located on a surface to be cleaned, with the suction brush being configured to come into contact with the surface to be cleaned;

a cyclone dust collecting apparatus, having an air inlet and a cyclone air outlet, detachably mounted at a rear side of the main body of the vacuum cleaner, having a cyclone body for guiding the air drawn in through the suction brush and being shaped and configured to form a vortex air current, and a dust receptacle detachably coupled to the cyclone body, and a grill disposed in the dust receptacle;
and

a detachable flexible hose connecting the cyclone dust collecting apparatus air inlet to and the suction brush so as to guide the air drawn in through the suction brush to the cyclone dust collecting apparatus, wherein when the cyclone dust collecting apparatus is mounted to the main body, so that dust and filth entrained in the air drawn in through the suction brush is separated in the cyclone dust collecting apparatus in a primary filtering operation and is further separated in the dust filter in the dust collecting chamber of the main body of the vacuum cleaner in a secondary filtering operation, and wherein when the cyclone dust collecting apparatus is detached from the main body and the flexible hose is attached to the main body, dust and filth entrained in the air drawn in through the suction brush is carried through the flexible hose into the dust filter in the dust collecting chamber of the main body of the vacuum cleaner.

10. (Original) The vacuum cleaner of claim 9, wherein a first receiving depression is formed at the rear side of the main body of the vacuum cleaner upon which the cyclone

Application Serial No. 10/674,162
Reply to Office Action of July 19, 2006

PATENT
Docket: CU-3338

body is mounted and a second receiving depression is formed at the rear side upon which the dust receptacle is mounted.

11. (Original) The vacuum cleaner of claim 9, wherein the cyclone body further comprises:

a duct connected at one end to the air inlet of the dust collecting chamber;
and

a fixing unit detachably coupling the cyclone dust collecting apparatus to the main body of the vacuum cleaner.

12. (Currently Amended) The vacuum cleaner of claim 11, wherein the duct has a bent portion between a first coupling portion connected to the cyclone air outlet and a second coupling portion connected to the air inlet of the dust filter.

13. (Currently Amended) The vacuum cleaner of claim 11, wherein the fixing unit further comprises:

a coupling projection formed at a [[the]] first receiving depression in the main body; and

a coupling recess formed in the duct at a position corresponding to the coupling projection.

14. (Original) An upright ~~type~~ vacuum cleaner comprising:

a main body including a dust collecting chamber having an air inlet and an air

Application Serial No. 10/674,162
Reply to Office Action of July 19, 2006

PATENT
Docket: CU-3338

outlet, and a motor driving chamber in fluid communication with the air outlet;

a suction brush mounted adjacent the main body of the vacuum cleaner to draw in contaminant-laden air found on a surface to be cleaned, with the suction brush being configured to come into contact with the surface to be cleaned;

a cyclone dust collecting apparatus, detachably mounted at a rear side of the main body of the vacuum cleaner, having a cyclone body for guiding the air drawn in through the suction brush, and being shaped and configured to form a vortex air current, a dust receptacle detachably coupled to the cyclone body, and a grill disposed in the dust receptacle; and

a flexible hose connecting the cyclone dust collecting apparatus and the suction brush so as to guide the air drawn in through the suction brush to the cyclone dust collecting apparatus;

wherein the cyclone dust collecting apparatus may be detached and the flexible hose may be connected directly to the main body of the vacuum cleaner, so that the dust and filth entrained in the air drawn in through the suction brush is separated in the dust collecting chamber of the main body of the vacuum cleaner.